WHAT IS CLAIMED IS:

1. A method of fitting acquired fiducial data to a set of fiducials on a fiducial plate; said method comprising:

fitting a fiducial grid model to data acquired by an imaging apparatus;

establishing a conversion from acquired coordinates to ideal fiducial coordinates; and

calculating an absolute location of identified acquired image feature centers in fiducial plate coordinates.

2. The of claim 1 wherein said fitting comprises identifying fiducial coordinates for each fiducial captured in said data acquired by said imaging apparatus.

3. The method of claim 2 further comprising selectively iterating said identifying coordinates for each fiducial and said calculating an absolute location of identified acquired image feature centers.

4. The method of claim 1 wherein said calculating comprises utilizing a linear least squares operation.

5. The method of claim 1 further comprising assuming that a rotation of said imaging apparatus relative to a fiducial grid is negligible.

6. The method of claim 1 wherein said imaging apparatus comprises a charge-coupled device camera.

7. The method of claim 1 wherein said imaging apparatus comprises a complementary metal-oxide semiconductor device.

8. A method of accurately measuring a location of a feature relative to a known set of fiducials; said method comprising:

acquiring image data;

responsive to said acquiring, representing a location of a fiducial in a local fiducial space coordinate system; and

mapping a coordinate in said local fiducial space coordinate system to a corresponding location in an image apparatus space.

9. The method of claim 8 wherein said mapping comprises employing a polynomial fit in terms of fiducial coordinates.

10. The method of claim 9 wherein said employing comprises utilizing a second order polynomial fit.

11. The method of claim 9 wherein said employing comprises utilizing a third order polynomial fit.

12. A method of fitting a set of measured fiducial data to an ideal set of fiducials, where the fiducials are arranged in a Cartesian grid pattern on a substantially transparent substrate; said method comprising:

acquiring said measured fiducial data employing an imaging apparatus;

responsive to said acquiring, representing a location of a fiducial in a local fiducial space coordinate system; and

mapping a coordinate in said local fiducial space coordinate system to a corresponding location in a space associated with said image apparatus.

13. The method of claim 12 wherein said mapping comprises employing a polynomial fit in terms of fiducial coordinates.

14. The method of claim 13 wherein said employing comprises utilizing a second order polynomial fit.

15. The method of claim 13 wherein said employing comprises utilizing a third order polynomial fit.

16. A computer readable medium encoded with data and instructions for fitting acquired fiducial data to a set of fiducials on a fiducial plate; said data and said instructions causing an apparatus executing said instructions to:

fit a fiducial grid model to data acquired by an imaging apparatus;

establish a conversion from acquired coordinates of each identified fiducial to ideal fiducial coordinates; and

calculate an absolute location of identified acquired image feature centers in fiducial plate coordinates.

17. The computer readable medium of claim 16 further encoded with data and instructions; said data and said instructions further causing an apparatus executing said instructions to identify fiducial coordinates for each fiducial captured in said data acquired by said imaging apparatus.

18. The computer readable medium of claim 17 further encoded with data and instructions; said data and said instructions further causing an apparatus executing said instructions selectively to iterate identifying coordinates for each fiducial and calculating an absolute location of identified acquired image feature centers.

19. The computer readable medium of claim 16 further encoded with data and instructions; said data and said instructions further causing an apparatus executing said instructions to utilize a linear least squares operation.

20. The computer readable medium of claim 16 further encoded with data and instructions; said data and said instructions further causing an apparatus executing said instructions to assume that a rotation of said imaging apparatus relative to a fiducial grid is negligible.